

ABSTRACT OF THE DISCLOSURE

A design data generating apparatus for generating new
5 design data of an article by performing a shape transformation
process with respect to design data of the article which has
been already generated comprises an input device which receives
transformation instructions from an operator and an operation
device which performs an operation of the design data in
10 accordance with the input transformation instructions. The
input device receives input of allocation of article shape
attribute between an attribute of a transformation region which
is to be transformed and an attribute of a maintaining region
which maintains its shape, and input of a transformation
15 instruction vector defined by a direction and an amount of
transformation with respect to the article. The operation
device performs a transformation process with respect to a node
which defines an article shape of the transformation region in
accordance with the transformation instruction vector.
20 Specifically, the operation device fixes a node located at a
boundary between the transformation region and the maintaining
region, and transforms a node not located at the boundary.
Thus, a new three-dimensional shape which the operator expects
can be efficiently designed.